

Appendix D. Finding of No Significant Impact

FINDING OF NO SIGNIFICANT IMPACT AND DECISION TO OPEN HUNTING ON

GREEN RIVER NATIONAL WILDLIFE REFUGE *HENDERSON COUNTY, KENTUCKY*

The U.S. Fish and Wildlife Service (USFWS, Service) is opening Green River National Wildlife Refuge (NWR, refuge) in Henderson County, Kentucky to hunting opportunities in accordance with the refuge's Migratory Game Bird and Big Game Hunting Plan (Section A) / Environmental Assessment (EA, Section B) and Hunting Compatibility Determination (Appendix C) (USFWS 2024).

In 2019, through a Land Protection Plan (LPP) / EA / Finding of No Significant Impact (FONSI), the Service established the Green River NWR, designating a Conservation Partnership Area (CPA) of approximately 53,000 acres along the Ohio and Green rivers in Henderson County, Kentucky (USFWS 2019). Within this 53,000-acre CPA, the Service is authorized up to 24,000 acres for the refuge. By the end of 2023, the refuge had grown to approximately 2,197 acres, allowing the Service to consider recreational opportunities, such as hunting, to be conservatively opened as outlined in the 2019 Conceptual Management Plan (CMP) (USFWS 2019). Taking a comprehensive approach, the 2024 EA, Hunting Plan, and Compatibility Determination analyzed and outlined hunting throughout the 53,000-acre CPA for the refuge, providing for future hunt packages to tier off of the 2024 Hunting Plan / EA / FONSI as additional properties are added to the refuge and evaluated for the potential to provide opportunities for hunting (USFWS 2024).

For clarity, as outlined in the EA and Hunting Plan, the 2024-25 hunt season for Green River NWR includes migratory game birds (specifically duck, goose, coot, merganser) and archery and crossbow hunting for big game (white-tailed deer and eastern wild turkey); the 2025-26 season is expected to include quota archery and crossbow deer/turkey. Since the Proposed Action includes firearms hunting of migratory game birds and archery and crossbow hunting of white-tailed deer (*Odocoileus virginianus*) and eastern wild turkey (*Meleagris gallopavo silvestris*), lead ammunition is not included in the proposed hunts. Newly acquired areas, as

outlined in the Hunting Plan/EA/FONSI (USFWS 2024), will be evaluated and potentially opened to hunting activities in accordance with procedures outlined by Service policies and the Service's hunting and sport fishing rulemaking process.

Selected Action

Alternative B – Implement the 2024 Green River NWR Migratory Game Bird and Big Game Hunting Plan (Proposed Action):

While the EA and Hunting Plan evaluated hunting of the below-listed species throughout the 53,000-acre CPA, given the ongoing acquisition program for the refuge and the current size of the refuge (approximately 2,197 acres in 2023), not all species and areas were included in the 2024-25 hunt opening for Green River NWR.

Migratory Game Birds

- Duck (see state regulations)
- Teal (*Anas discors*, *Anas crecca carolinensis*, *A. cyanoptera*)
- Wood Duck (*Aix sponsa*)
- Merganser (*Mergus serrator*, *Lophodytes cucullatus*, *Mergus merganser*)
- Coot (*Fulica americana*)
- Goose (*Branta canadensis*, *B. hutchinsii*, *Anser albifrons*, *A. erythropus*, *Anser caerulescens*, *A. c. atlantica*, *A. rossii*)
- Dove (*Zenaida macroura*, *Z. asiatica*, *Streptopelia decaocto*, *S. risoria*)

Big Game (Archery/crossbow only)

- White-tailed Deer (*Odocoileus virginianus*)
- Turkey (*Meleagris gallopavo silvestris*)

Beginning in the 2024-25 hunt season and following publication of the 2024-25 Hunting and Sport Fishing Rule in the Federal Register, the Service is opening ~589 acres of the Horseshoe Bend Unit to the listed hunts.

- Migratory waterfowl hunting (duck, goose, coot, and merganser) for youth, seniors, and disabled hunters, as defined by the state, during the months of December and January of the statewide season and for youth and veterans in February for the state-wide veterans and youth dates

- Deer and turkey archery and crossbow only hunting for youth, seniors, and disabled hunters, as defined by the state, during the months of September and October of the statewide season
- Turkey archery and crossbow only hunting for youth only, as defined by the state, during the months of April and May of the statewide season

Beginning in the 2024-25 hunt season and following publication of the 2024-25 Hunting and Sport Fishing Rule in the Federal Register, the Service is opening ~204 acres of the Tscharner West section of the Bluff Unit to the listed hunts.

- Deer and turkey archery and crossbow only hunting for youth, seniors, and disabled hunters, as defined by the state, during the months of September and October of the statewide season
- Turkey archery and crossbow only hunting for youth only, as defined by the state, during the months of April and May of the statewide season

Beginning in the 2025-26 hunt season and following publication of the 2024-25 Hunting and Sport Fishing Rule in the Federal Register, given the logistical timing of approval for hunt plans, as well as the time needed for applications, awards, and permit issuance, the Service will open approximately ~793 acres (i.e., ~589 acres in Horseshoe Bend and ~204 acres of the Tscharner West section of Bluff Unit) to the listed hunts.

- Quota archery and crossbow deer/turkey in November of the statewide season

While not included in the 2024-25 hunt opening, dove was evaluated in the EA and Hunting Plan and could be included in future hunt openings for the refuge. The state of Kentucky has special hunting regulations related to dove hunting that requires non-toxic shot on state wildlife management areas (301 KAR 2:225); Green River NWR will follow these regulations regarding the hunting of doves.

The draft EA also included incidental take of feral hogs as a proactive measure; feral hogs are not currently established on the refuge and are not considered a game species. Since the initiation of the 2024-25 hunt package for Green River NWR, the Kentucky Department of Fish and Wildlife Resources (KDFWR) made it illegal to hunt feral hogs within the state of Kentucky, therefore the Service removed feral

hog from the hunt package for the refuge, including from the final EA, and will not allow the public hunting of feral hogs on Green River NWR. With the potential for the spread of this invasive species onto refuge properties and with the potential for the future acquisition of properties with feral hogs, the Service would work with partners to implement a variety of tools to control and eliminate them from refuge properties. Hogs are an invasive, exotic species that damage native habitats and prey on native wildlife. The objective of a feral hog control program would be to reduce numbers to levels that minimize impacts to acceptable levels, and where possible, completely eradicate them. If feral hogs were to be found on Green River NWR, the Service would have the flexibility to employ a variety of tools to control and eliminate them from the refuge.

Alternative B was selected over the Alternative A because it best met the stated purpose and need. Alternative B implements portions of the CMP (USFWS 2019) related to providing high quality opportunities for compatible hunting on the refuge. Further, Alternative B, as outlined in the Hunting Plan and the Hunting CD and as analyzed in the EA, conserves, manages, and restores fish, wildlife, and plant resources; conserves Federally listed species; conserves wetlands to maintain public benefits and help meet international obligations; provides sanctuary for migratory birds; and provides opportunities for wildlife-oriented recreation. Alternative B serves the National Wildlife Refuge System Improvement Act and Secretarial Order 3356; evaluates compatibility of the proposed hunting uses; and protects the biological integrity, diversity, and environmental health of the refuge. Serving goals outlined in the CMP (USFWS 2019) and helping to make hunting more accessible to the American public, Alternative B helps align the refuge with state hunting regulations and serves stated Service priorities and mandates.

All proposed methods of approved take have been developed with the objective of humanely dispatching the animal. Approved hunts, including dates, time, and method of take, while involving the killing of individuals, are developed with humaneness and animal welfare concerns. Established hunter training, hunter ethics, and hunter responsibilities would help ensure hunters continue to use good judgment related to humaneness and animal welfare. Over time, harvest information collected, by either the Service or KDFWR, and refuge public use evaluations would allow the Service to make any needed modifications to refuge-specific regulations and the hunting program to assure that these proposed uses

serve refuge purposes, refuge management priorities and goals, and public safety needs, and continue to meet compatibility requirements.

The hunting program was designed to be sustainable, meeting compatibility requirements, under Federal and state frameworks, within outlined hunting visit and species take estimates. Based on the analysis within the EA, the Hunting Plan and the Hunting CD provide the Service the flexibility to meet compatibility requirements, provide opportunities for high quality hunting, and assure public safety, while also responding to the acquisition of new properties and the potential to include those properties in the hunting program, responding to changing wildlife needs, responding to changing habitat conditions, and adapting refuge management and public use programs accordingly to serve refuge purposes and the mission of the National Wildlife Refuge System.

Other Alternatives Considered and Analyzed

Alternative A – Continue Current Management (No Action Alternative)

Under Alternative A, hunting would not be permitted on Green River NWR in the near term. As outlined in the 2019 CMP of the LPP/EA/FONSI (USFWS 2019), under Alternative A the Service would consider opening the refuge to hunting in the future. The LPP/EA/FONSI (USFWS 2019) outlined the Service's intent to add property to Green River NWR up to 24,000 acres within the designated 53,000-acre CPA, which would continue under Alternative A. Further, under Alternative A, existing and future refuge properties would serve as habitat for fish and wildlife, as well as provide outdoor recreational opportunities for other priority wildlife dependent public uses, including wildlife observation, wildlife photography, environmental education, and interpretation. Refuge management and partner activities would control adverse impacts from invasive species. Under Alternative A, no additional take of wildlife would occur since no hunting activities would be allowed in the near term on existing and future refuge properties. Depending on the pre-acquisition use of a property and following the acquisition of that property, wildlife and habitat could see a decrease in disturbance due to the change in the land use to conservation as properties are acquired under the refuge's active acquisition program. Migratory game birds, big game, non-target wildlife and aquatic species, threatened and endangered species and other special status species, and habitat and vegetation (including vegetation of special management

concern) would be expected to continue to occur on existing and future refuge properties under Alternative A. These resources would be anticipated to continue to experience neutral to minor beneficial impacts under Alternative A due to the acquisition and conservation of additional properties as outlined in the 2019 LPP and CMP (USFWS 2019).

Alternative A was not selected because it did not best serve the stated purpose and need. The LPP/EA/FONSI and CMP (USFWS 2019) specifically outlined that the refuge would be opened to hunting. Goal 3 in the CMP specifically included hunting as a way the refuge would help connect people with nature (USFWS 2019). These would not be met in the short term under Alternative A. Hunting activities would not be utilized to support or manage healthy wildlife populations or negative environmental impacts of overpopulation of some species. In addition, the refuge's ability to connect with certain segments of the public would potentially be weakened. Hunters would continue to pursue opportunities off-refuge, and thus the refuge's ability to reach those members of the public and promote natural resources conservation, environmental education, and natural resource stewardship would be limited. In addition, under Alternative A, the refuge would not align with state regulations for hunting. All other public uses on the refuge would not change and would continue to be managed as described in current plans. Wildlife and habitat could experience impacts ranging from minor adverse to minor beneficial due to potential overpopulation of certain species (e.g., white-tailed deer).

Summary of Effects of the Selected Action

An EA (USFWS 2024) was prepared in compliance with the National Environmental Policy Act (NEPA) to provide decision-making framework that 1) explored a reasonable range of alternatives to meet project objectives, 2) evaluated potential issues and impacts to the refuge, resources and values, and 3) identified mitigation measures to lessen the degree or extent of these impacts. The EA evaluated the effects associated with Alternative B (Proposed Action). It is incorporated as part of this finding.

Based on the Hunting Plan (Section A), the Hunting CD (Appendix C), the refuge-specific regulations published in the Federal Register, and the analysis in the EA (Section B), no significant adverse or beneficial direct, indirect, short-term, long-

term, or cumulative impacts are anticipated from the implementation of Alternative B. The Cumulative Impacts Report for the 2024-25 Refuge-specific Hunting and Sport Fishing Rule identified and assessed the direct, indirect, short-term, long-term, and cumulative impacts for all the proposed actions included in the 2024-25 Hunting and Sport Fishing Rule; the Cumulative Impacts Report was published in the Federal Register and is incorporated into the EA by reference.

Alternative B opens hunting on the current approximately 793.13 acres and future acquired refuge properties up to 24,000 acres within the 53,000-acre CPA. While Alternative B represents the take of individual animals, population impacts are expected to be negligible since the hunting program was designed to be sustainable, adaptable, and based on state and Federal regulations and frameworks. Depending on the pre-acquisition use of a property and following the acquisition of that property, wildlife and habitat could see a decrease in disturbance due to the change in the land use to conservation as properties are acquired under the refuge's active acquisition program. Migratory game birds, big game, non-target wildlife and aquatic species, threatened and endangered species and other special status species, and habitat and vegetation (including vegetation of special management concern) are expected to continue to occur on existing and future refuge properties under Alternative B. These resources are anticipated to continue to experience neutral to minor beneficial impacts under Alternative B due to existing acquisition and conservation of additional properties as outlined in the 2019 LPP and CMP (USFWS 2019) and due to management under the hunting program (USFWS 2024). Further, minor beneficial impacts are expected for visitor use and experience under Alternative B. The hunting activities will help manage local deer populations at levels more favorable for the species' overall health. Habitat and crop damage by overpopulated deer will be reduced. Refuge management and partner activities will continue to control or eliminate adverse impacts from invasive species, such as the feral hog. Further, neutral impacts will be anticipated for Federally listed species; an Endangered Species Act Section 7 consultation was developed with the determination that the Proposed Action would not likely conflict with recovery or protection of these species. The refuge will limit or exclude hunting activities where biological concerns exist or arise. Hunting opportunities can potentially cause conflicts with other users; however, this impact is expected to be minor. The Service will continue to evaluate uses and impacts of and toward those uses to ensure compatibility requirements are met, address any conflicts between users and between user groups, assure public safety, and balance

other refuge management priorities. As needed and in response to changing conditions, refuge uses would be modified to ensure that they remain compatible, including meeting quality and safety needs. As public use levels on the refuge expand across time, unanticipated conflicts between user groups may occur. In an effort to minimize conflicts with priority non-hunting recreational uses outlined in the National Wildlife Refuge System Improvement Act, and for public safety, the refuge may designate areas closed to hunting and consider space or time zoning as well. To ensure that uses continue to meet compatibility requirements, the refuge will annually re-evaluate the hunting program to determine if adjustments are needed to provide quality wildlife-dependent recreational opportunities, while promoting public safety and maintaining healthy populations of wildlife.

Minimization and Mitigation Measures

Measures to mitigate and/or minimize adverse effects have been incorporated into the selected action as outlined in the Hunting Plan (Section A), EA (Section B), and Hunting Compatibility Determination (Appendix C). The hunting program was designed to be sustainable, adaptable, and based on state and Federal regulations and frameworks. Refuge and hunt area boundaries will be clearly posted with signage. Hunting on the refuge must be conducted in accordance with state and Federal regulations, and special refuge regulations published in the annual refuge hunt brochure and outlined in 50 Code of Federal Regulations (particularly parts 20, 25, 26, and 32). Season dates, hunt methods, species hunted, quota hunt application procedures, and other hunt related information and restrictions are located on the refuge website and in the hunt brochure. Federal wildlife law enforcement officers will promote compliance with refuge regulations, monitor public use patterns and public safety, and document visitor interactions. Law enforcement personnel will monitor all areas and enforce all applicable state and Federal regulations. The Service will regularly evaluate the hunt program to determine the need for any changes, including any changes to the Code of Federal Regulations. Hunting on the refuge may be more restrictive than state seasons and regulations to ensure compliance and to provide for public safety, reduce wildlife and habitat disturbance, facilitate opportunities for high-quality hunting, and to meet other refuge management goals and objectives.

This use is subject to modification if on-site monitoring by refuge personnel or other authorized personnel results in a determination that hunting is causing unanticipated adverse impacts to natural communities, wildlife species, wildlife

habitat, or other refuge management goals and objectives. The refuge will limit or exclude hunting activities where biological concerns exist or arise. The Service will continue to evaluate uses and impacts of and toward those uses to ensure compatibility requirements are met, address any conflicts between users and between user groups, assure public safety, and balance other refuge management priorities. As needed and in response to changing conditions, refuge uses would be modified to ensure that they remain compatible, including meeting quality and safety needs. As public use levels on the refuge expand across time, unanticipated conflicts between user groups may occur. In an effort to minimize conflicts with priority non-hunting recreational uses outlined in the National Wildlife Refuge System Improvement Act, and for public safety, the refuge may designate areas closed to hunting and consider space or time zoning as well. To ensure that uses continue to meet compatibility requirements, the refuge will annually re-evaluate the hunting program to determine if adjustments are needed to provide quality wildlife-dependent recreational opportunities, while promoting public safety and maintaining healthy populations of wildlife. The Refuge Manager may, upon review of the hunting program and in coordination with the KDFWR, impose further restrictions on hunting on the refuge, recommend that the refuge be closed to hunting, or further liberalize hunting regulations within the limits of state seasons and regulations or as otherwise coordinated with KDFWR (e.g., to address chronic wasting disease). Hunting restrictions may be implemented to meet other refuge management goals and objectives, ensure continued compatibility of the use, and/or meet public safety needs.

Public Review

The proposal has been thoroughly coordinated with all interested and/or affected parties. The Service sent scoping letters to KDFWR and nine potentially interested Native American Tribes (i.e., Cherokee Nation, Chickasaw Nation, Delaware Nation of Oklahoma, Eastern Band of Cherokees, Miami Tribe of Oklahoma, Osage Nation, Peoria Tribe of Indians of Oklahoma, Quapaw Tribal Business Committee, and United Keetoowah Band of Cherokee Indians) on March 31, 2021 with follow up letters on January 4, 2024 and August 2, 2024, to engage them early in the planning process for the proposed hunting program at Green River NWR. The EA, draft Hunt Plan, draft Hunting Compatibility Determination, and draft refuge-specific regulations were made available for public review and comment in 2024 nationally through the Federal Register (<https://www.federalregister.gov/>) and locally through the refuge's website (<https://www.fws.gov/refuge/green-river>) and

Facebook page (<https://www.facebook.com/GreenRiverNWR/>). Separate notice was also provided to KDFWR and the nine above-mentioned Native American Tribes.

All comments received were reviewed in the development of final documents. All comments received become part of the official public record. We will handle all requests for such comments in accordance with the Freedom of Information Act and National Environmental Policy Act regulations in 40 CFR §1506.6(f). Only one comment was received on the refuge's hunt package; it was non-substantive.

The Service provided notice of the final decision to open the refuge to hunting as outlined in the 2024-25 hunt package through the Federal Register (<https://www.federalregister.gov/>) and the refuge's website (<https://www.fws.gov/refuge/green-river>).

Finding of No Significant Impact

While refuges, by their nature, are unique areas protected for conservation of fish, wildlife and habitat. As outlined in the EA and summarized below, the Proposed Action will not have a significant impact on refuge resources.

- The action represents less than 1% of state deer and turkey annual harvest totals in Kentucky, less than 1% of the migratory bird annual harvest totals for the Mississippi Flyway, and less than 1% of the Eastern Management Unit mourning dove annual harvest totals. The Service works closely with the state to ensure that additional species harvested on a refuge are within the limits set by the state to ensure healthy populations of the species for present and future generations of Americans.
- The action will result in minor beneficial impacts to the human environment, including the biodiversity and ecological integrity of the refuge, as well as the wildlife-dependent recreational opportunities and visitor use and experience.
- No or negligible impacts of the action are expected for geology and soils, air quality, floodplains, cultural resources, and socioeconomics.
- The benefits to long-term ecosystem health that these efforts will accomplish far outweigh any of the short-term adverse impacts.
- The NWRS uses an adaptive management approach to all wildlife management on refuges, annually monitoring and re-evaluating the hunting

opportunities on the refuge to ensure that the hunt program continues to contribute to the biodiversity and ecosystem health of the refuge and to ensure that these hunt opportunities do not contribute to any cumulative impacts to habitat or wildlife from climate change; population growth and development; or local, state, or regional wildlife management.

- The action will ensure that there is low danger to the health and safety of refuge staff, visitors, and the hunters themselves.
- The action is not in an ecologically sensitive area.
- The action will not have significant adverse impacts to any threatened or endangered species or to any Federally-designated critical habitat.
- The action will not impact any cultural or historical resources.
- The action will not impact any Wilderness Area.
- There is no scientific controversy over the impacts of this action and the impacts of the action are relatively certain.
- The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988; Green River NWR will be managed to conserve, manage, and restore fish, wildlife, and plant resources; conserve Federally listed species; conserve wetlands to maintain public benefits and help meet international obligations; and provide sanctuary for migratory birds while providing opportunities for wildlife-oriented recreation.

Based upon a review and evaluation of the information contained in the EA as well as other documents and actions of record affiliated with this proposal, the Service has determined that the proposal to implement the opening of hunting on Green river NWR does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102 (2) (c) of the National Environmental Policy Act of 1969 (as amended). As such, an environmental impact statement is not required.

Decision

The Service has decided to open Green River NWR to hunting as outlined in the 2024 Hunting Plan with hunting activities to begin on the refuge following publication of the final 2024-25 Hunting and Sport Fishing Rule in the Federal Register.

This action is compatible with the purposed of the refuge and the mission of the National Wildlife Refuge System. See the attached Hunting Compatibility Determination (Appendix C).

The action is consistent with applicable laws and policies.

Signature/Date/Title

References

U.S. Fish and Wildlife Service. 2019. Land Protection Plan/Conceptual Management Plan and Environmental Assessment for Green River National Wildlife Refuge and Conservation Partnership Area. U.S. Department of the Interior Fish and Wildlife Service, Southeast Region. Atlanta, GA.
<https://ecos.fws.gov/ServCat/Reference/Profile/143616>.

U.S. Fish and Wildlife Service. 2024. Green River National Wildlife Refuge Migratory Game Bird and Big Game Hunting Plan and Environmental Assessment. U.S. Department of the Interior, Fish and Wildlife Service, Southeast Region. October 2024. Atlanta, GA.